

**CLAIMS**

1. Apparatus comprising a first member, the first member being arranged for releasable connection to a  
5 second member;

said first member being provided with a set of elements to co-operate with a corresponding set of elements on the second member to define the location of the first member with respect to the second member when  
10 the first member and second member are brought into contact with one another;

a damper on the first member, such that relative motion between the first member and second member is damped as they are brought into contact with one  
15 another.

2. Apparatus according to claim 1 wherein the first member and second member are releasably held together by magnetic means.

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3. Apparatus according to any preceding claim wherein the damper comprises a housing in which a piston is located, said piston being biased to protrude from the housing and wherein the housing is filled with a  
25 viscous substance.

4. Apparatus according to any preceding claim in which the damper comprises at least one guide means which assists in guiding the first member and second  
30 member together.

5. Apparatus according to claim 4 wherein the at least one guide means comprises at least one guide pin attached to the damper, said at least one guide pin

being received by at least one corresponding recess on the second member.

6. Apparatus according to claim 5 wherein the arrangement of the at least one guide pin and at least one corresponding recess is such that said at least one guide pin and recess do not interfere with the position of the first member relative to the second member as defined by the cooperating elements.

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7. Apparatus according to any preceding claim wherein the first and second elements define the position of the first member with respect to the second member kinematically.

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8. Apparatus according to any preceding claim wherein when the first member and second member are connected together, the position of the first member relative to the second member is defined solely by the co-operating elements.

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9. Apparatus according to any preceding claim wherein the first member is a retaining module of a modular surface sensing probe and the second member is a task module of said modular surface sensing probe.

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10. Apparatus according to any of claims 1-8 wherein the second member is a retaining module of a modular surface sensing probe and the first member is a task module of said modular surface sensing probe.

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11. Apparatus according to any one of the preceding claims, in combination with a said second member; wherein the second member is also provided with a

damper, such that relative motion between the first member and the second member is damped as they are brought into contact with one another.

- 5 12. A task module for releasable connection to a retaining module of a modular surface sensing probe, the task module comprising:

a member to be releasably coupled to a retaining module;

- 10 a set of elements on said member to co-operate with a corresponding set of elements on the retaining module to define the location of the task module with respect to the probe when the task module and retaining module are brought into contact with one another;

- 15 and a damper on the task module, such that relative motion between the task module and retaining module is damped as they are brought into contact with one another.

- 20 13. A task module according to claim 12 wherein the retaining module and task module comprise a probe head and probe respectively.

- 25 14. A task module according to claim 12 wherein the retaining module and task module comprise a sensing module and a stylus module of a probe.

- 30 15. A task module according to any of claims 12-14 wherein the damper comprises a damper housing in the member and a damper piston located in the damper housing biased to protrude from the housing.

16. A task module according to claim 15 wherein the housing is filled with a viscous substance to resist

movement of the damper piston within the damper housing.

17. A modular surface sensing probe comprising:
- 5       a retaining module;
- a task module releasably connectable to the sensing module;
- a first set of elements on said retaining module and a second set of elements on said task module, said
- 10   elements co-operating to define the location of the task module with respect to the retaining module when the task module and retaining module are brought into contact with one another;
- wherein a damper is provided on at least one of
- 15   said task module and retaining module, such that relative motion between the task module and retaining module is damped as they are brought into contact with one another.